

INSECTS OF MICRONESIA

Coleoptera: Cybocephalidae¹

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TAMALE, GHANA

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Cybocephalidae: Endrödy-Younga, 1962, *Ann. Hist. Nat. Hung.* **54**: 272.
Endrödy-Younga, 1968, *Acta Zool. Acad. Sci. Hung.* **14**: 27-37.

From the several genera of the family only two are known from the Oriental Region and from Micronesia only one, *Cybocephalus* Er., can be recorded.

Genus **Cybocephalus** Erichson

Cybocephalus Erichson, 1844, in *Germ. Zeit.* **5**: 441.

Phantazomerus Jacquelin Duval, 1854, *Bull. Soc. Ent. Fr.*, p. 307.

Stagonomorpha Wollaston, 1854, *Ins. Mader.*, p. 482.

Dissia Chobaut, 1896, *Bull. Soc. Ent. Fr.*, p. 167.

The genus is represented by many species in the Oriental and Australian regions but the rich Micronesian material (155 specimens) has provided only 3 species. Two of the species show a very close relation to the Oriental and Palearctic fauna but the third seems to be endemic in Micronesia. *C. nipponicus* E.-Y. occurs from Japan through China and India to Micronesia without splitting into geographical races. *C. politissimus* Reitt. forms several geographical races (partly undescribed) from the Palearctic through Tonkin, Philippines, Micronesia to the Solomon Islands. *C. gressitti* n. sp. has no close rela-

¹This represents, in part, Results of Professor T. Esaki's Micronesian Expeditions (1936-1940), No. 131. Printed with funds from NSF grant GN-160 to Bishop Museum.

tions on either side of its Micronesian distribution.

1. *Cybocephalus politissimus palauanus* Endrödy-Younga, n. subsp. (fig. 1)

This new form is a geographical race of *C. politissimus* Reitter, a species with an apparently vast distribution area from the Mediterranean to the Solomon Islands. The species seems to be very conservative on the temperate part of the Eurasian continent but splits into geographical races in the Oriental archipelagoes.

Dark brown, only head of male and lateral margin of prothorax in both sexes yellowish brown or yellow. The new subspecies will be described in comparison with subsp. *politissimus* Reitt.

MALE: Head short and broad, clypeus produced. Eyes broader with more arcuated internal margin. Surface of disc shiny though shagreening somewhat more distinct; very finely punctured. Brownish yellow. Prothorax similar. Three-armed punctuation of elytra more distinct. Ventral side, antennae, front tibiae and flat angle of hind margin of hind femur similar. Penis broad, apical margin slightly more arcuate truncate, apical side angles more obtuse; triangular median protuberance very small. Median plate of the surface at the apex elevated (fig. 1 a, b). Length 0.16 mm, breadth 0.15 mm. Basal plate small, shorter triangular (fig. 1 c). Length 0.17 mm, breadth 0.15 mm.

FEMALE: Unicolorous dark brown, only lateral margin of prothorax and apical margin of elytra lighter, transparent. Length: 1.0 mm.—Breadth 0.8 mm.

Material examined: 5 ♂ and 1 ♀. Holotypus ♂ (US 71553), allotypus ♀ and 3 paratypes: Koror, 24. Nov. 1947, H.S. Dybas (US, Field); 1 paratype: Koror, 31. May 1953, J.W. Beardsley (Bishop).

DISTRIBUTION: W. Caroline Is. (Palau).

2. *Cybocephalus nipponicus* Endrödy-Younga (fig. 2)

Cybocephalus binotatus: Endrödy-Younga (*non* Grouvelle), 1968, Acta Zool. Acad. Sci. Hung. **14**: 81–82.

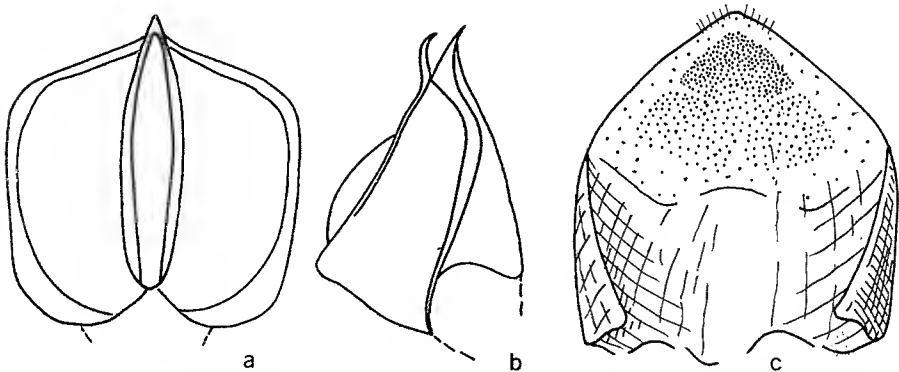


FIGURE 1. *Cybocephalus politissimus palauanus* n. ssp. a, penis, dorsal view; b, penis lateral view; c, basal plate, ventral view.

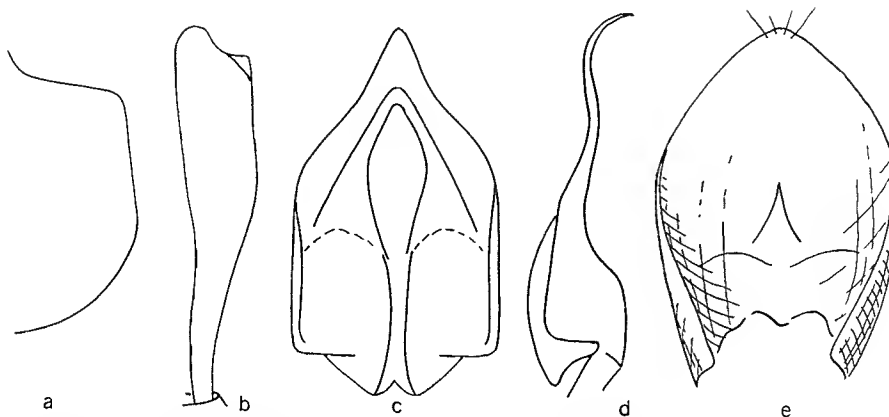


FIGURE 2. *Cybocephalus nipponicus* E.-Y. a, lateral lobe of prothorax; b, front tibia; c, penis dorsal view; d, penis lateral view; e, basal plate, ventral view.

Cybocephalus nipponicus Endrödy-Younga, 1971, Acta Zool. Acad. Sci. Hung., 17: 244—245.

MALE: *Head* broad, clypeus moderately produced. Eyes large with internal margins strongly arcuate. Surface of disc shiny, sometimes finely and indistinctly shagreened; punctuation fine; yellow to yellowish brown. *Prothorax* strongly convex, lateral margins slightly curved or almost straight; anterior angle much narrower arcuate than posterior (fig. 2 a). Surface of disc very shiny, sometimes at the side lobes finely shagreened; punctuation fine; color similar to that of the head with narrow black basal margin. *Elytra* convex, sides and profile evenly arcuated, somewhat shorter than combined breadth (37:40). Surface shiny or finely shagreened; punctuation at the base fine and simple, towards middle clearly three-armed; black. *Prosternum* and mesosternum yellow or brown. Pygidium, abdomen and metasternum black with strong and indistinct sculpture and with dense, short silvery clothing of hairs. *Antennae* and legs yellow or light brown. Front tibiae towards apex slightly explanate, lateral angle of apex sharp right-angled (fig. 2 b). Hind femora simple, without an angle on the hind margin.—*Penis* large with parallel sides at base, from here to a large apical triangle extended, in profile twice strongly curved (fig. 2 c, d). Length 0.27 mm, breadth 0.15 mm. Basal plate with parallel sides at base, distally into a peak curved (fig. 2 e). Length 0.23 mm, breadth 0.16 mm.

FEMALE: Black, only lateral margin of prothorax and apical margin of elytra yellowish transparent. Length: 1.0–1.35 mm. Breadth: 0.75–0.95 mm.

DISTRIBUTION: Palearctic and Oriental Asia, Ceylon, Mariana Is., W. Caroline Is.

Material examined: 60 ♂ and 55 ♀. All specimens but the 4 ♀ from Ponape are paratypes.

S. MARIANA IS. SAIPAN: 13 ♂, 12 ♀, 20. Mar. 1959 (Bishop).

PALAU. MALAKAL: 2 ♂, 2 ♀, 27. Jan. 1964, ex soursop, J.A. Tenorio (Bishop)—KOROR: 4 ♂, 4 ♀, Jan. 1954, J.W. Beardsley (Bishop), 1 ♀, 4.1954, Beardsley (Bishop), 4 ♂, 7 ♀, 10. Jan. 1954, on ♂♂ *Pseudaulacaspis pentagona*

on cassava (Bishop); 11 ♂, 11 ♀, 23. Aug. 1946, on Coccids on *Pandanus* leaves, Oakley (US); 26 ♂, 18 ♀, 12. Nov. 1963, on *Aspidiotus destructor* on coconut leaves, Tenorio (Bishop).

PONAPE. 4 ♀, Colonia, 15. Nov. 1953, feeding on *Aspidiotus destructor* on coconut, Beardsley (Bishop Mus.).

3. *Cybocephalus gressitti* Endrödy-Younga, n. sp. (fig. 3)

Small, comparatively elongate species (fig. 3 a, b). Unicolorous dark brown, both sexes without metallic sheen. Antennae with 10 segments (fig. 3 c) but without any closer relation to the 10-segmented species of the Palearctic region (*C. decamerus* E.-Y., *C. aurocupreus* Rcitt., etc.).

MALE: Head comparatively narrow, clypeus produced. Front margin of labrum emarginate. Eyes elongate oval, almost parallel with longitudinal axis of head. Antennal fossae and temporal angle distinctly bordered, genae not visible on the side of eyes. Surface of disc

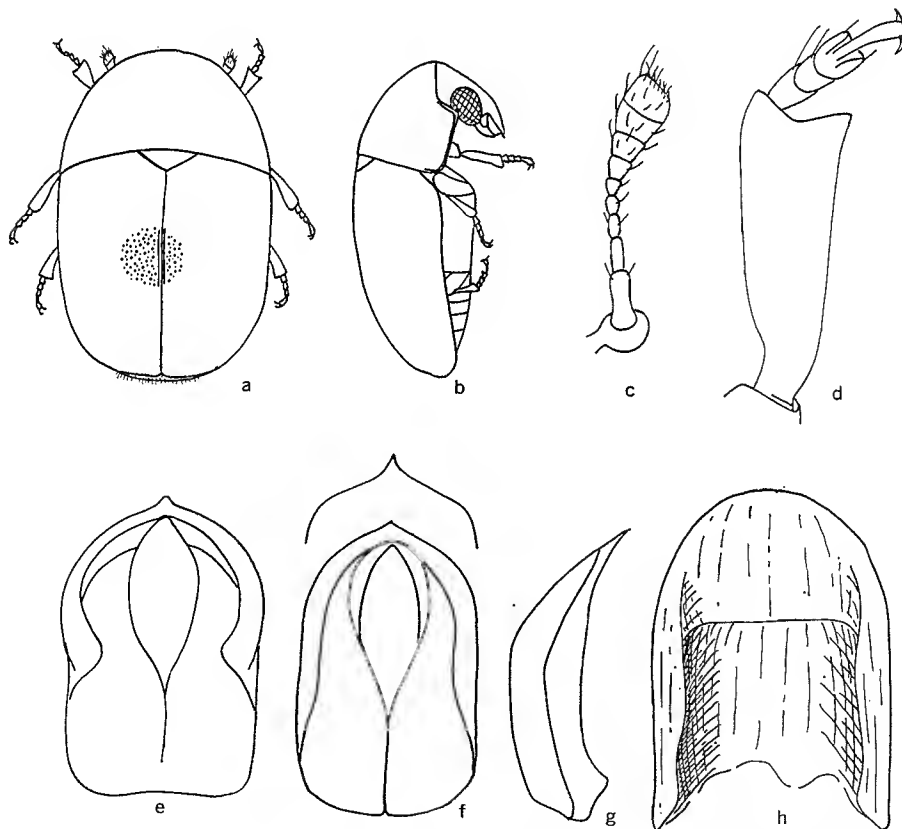


FIGURE 3. *Cybocephalus gressitti* n. sp. a, habitus in dorsal view; b, habitus in lateral view; c, antenna; d, front tibia and tarsi; e, penis, dorsal view of paratype from Satawan; f, penis, dorsal view of holotype; g, penis lateral view; h, basal plate, ventral view.

distinctly punctured and indistinctly shagreened or shiny. *Prothorax* strongly convex, lateral lobes vertical. Lateral margin long and straight, finely bordered and very finely explanate; front angle more obtuse and narrower rounded than hind angle (fig. 3 b). Punctuation uniform and distinct, surface shiny or indistinctly shagreened. *Elytra* longer than combined width (65: 55), sides almost parallel, apices only slightly rounded, almost truncate (fig. 3 a). Transversely strongly convex; profile in front almost straight, from the last third strongly rounded (fig. 3 b). Median margin and apex of elytra bordered. Punctuation consists of dense and sharply cut deep punctures and minute ones between them (fig. 3 a), punctuation only at apex finer, on the rest of disc being very short three-armed. Surface shiny only occasionally with traces of an indistinct shagreen at shoulders. *Metasternum* and abdomen roughly punctured and clothed with short dark brown hairs. *Antennae* 10 segmented, club indistinctly separated from funicle. 2nd segment cylindrical, 3rd only twice longer the width, the subsequent ones gradually shorter; 7th broader than long. Club compact, two ultimate segments hardly distinguishable (fig. 3 c). *Legs* like antennae dark brown. Front tibiae towards apex broadly dilatated, lateral angle sharp triangular. Tarsi short, first 3 segments only as long as the width of front tibiae at apex; claw segment long (fig. 3 d). Hind tibiae dilated. *Penis* very small, sides parallel at base, then evenly curved to an obtuse-angled apex (fig. 3 e, f, g). Length 0.17 mm, breadth 0.1 mm. Basal plate flatly rounded at apex (fig. 3 h). Length 0.19 mm, breadth 0.13 mm. The figures 3 e (a paratype from Satawan) and 3 f (holotype from Koror) represent two extreme forms of penis. Though the differences are obvious, they are not essential and cannot be connected with any other morphological characters or distribution. The silhouette over fig. 3 f is the vertical view of the apex of the same penis.

FEMALE: similar to male. Length: 1.0–1.6 mm. Breadth: 0.62–0.95 mm.

Material examined: 16 ♂ and 18 ♀. Holotype ♂ (US 71554) allotype ♀ and 34 paratypes from the collections of the Bishop Museum, Honolulu. KOROR: Holotype ♂ (US), and 1 paratype ♂, 19. Nov. 1947, H.S. Dybas; Allotype ♀ and 1 paratype ♂, limestone ridge S. of inlet, in dead crown of palm, 17. Jan. 1948, Dybas; Further paratypes: 1 ♂, Dec. 1952, Beardsley; 1 ♀, 24. Nov. 1947, Dybas.—PELELIU: 1 ♀, 5. Aug. 1945, E. Hagen; 2 ♂, 1 ♀, 2. Aug. 1945, lot 2382, Dybas.—WENA (Moen): 1 ♂, Oct. 1952, M-5106, Beardsley; 1 ♂, Mt. Teroken, 180 m, 1. Feb. 1953, Gressitt; 1 ♀, 19. Feb. 1948, Dybas.—PONAPE: 1 ♂, 1 ♀, Tol Olej, 12. Apr. 1940, Yasumatsu et Yoshimura; 2 ♀, Mt. Kupuriso, N. slope, 300–500 m, 8. Mar. 1948, beating vegetation, Dybas; 2 ♂, 1 ♀, id. 11. Mar. 1948; 2 ♂, 2 ♀, Agric. Exp. Station, Jun.–Sep. 1950, Adams; 1 ♂, Air field, Jun.–Sep. 1950, Adams; 1 ♀, Mt. Tamatamansakir, 100 m, 11. Jan. 1953, Gressitt; 2 ♀, id. 150–300 m, 29. Feb. 1948, secondary forest, beating vegetation, Dybas; 1 ♀, Tolotom, Jun.–Sep. 1950, Adams; 1 ♂, Tolenot Pk., Jun.–Sep. 1950, Adams; 2 ♀, Mt. Beirut, Jun.–Sep. 1950, Adams; 1 ♀, Mt. Peipalap, Jun.–Sep. 1950, Adams.—SATAWAN ATOLL: 1 ♂, 3. Nov. 1952, Beardsley.

DISTRIBUTION: Micronesia: Caroline Is.

This species is dedicated to Dr. J. Linsley Gressitt, of Bishop Museum, Honolulu.